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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/571,462	11/28/2006	Stefan Valdemarsson	43315-228610	6498
26694	7590	11/14/2008		
VENABLE LLP P.O. BOX 34385 WASHINGTON, DC 20043-9998			EXAMINER AMRANY, ADI	
			ART UNIT	PAPER NUMBER
			2836	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/571,462	VALDEMARSSON ET AL.	
	Examiner	Art Unit	
	ADI AMRANY	2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/18/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because the term, "exhibits" is not a proper term for an electrical circuit. The circuit may "include", "contain", "comprise", "have", etc. components, but the circuit does not "exhibit" this components.
2. Claim 4 is objected to because the phrase, "less than a good half" is unclear. Applicants are also directed to the limitation in claim 1 of "a limited predetermined angular motion" and the interpretation than any amount of motion made by the motor is predetermined. Subsequently, dividing this undefined angular motion in half is still a "predetermined angular motion."
3. Claims 15-16 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. It is inherent the point of the device of claim 1 is to use it (claim 15) and that an electric motor for operating en electrical component is an operating device (claim 16).
Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 1-2 and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugaya (US 4,262,614).

With respect to claims 1 and 13-14, Sugaya discloses a rotating electric motor (fig 4, item 15; col. 4) for operating an electric component (lines 21-24), said motor being adapted for an operation movement during a limited predetermined angular motion (inherent) of the rotor of the motor, said motor comprising an electric drive circuit (fig 4) for the winding of the motor, wherein the electric circuit exhibits at least one branch (col. 4, line 59 to col. 5, line 6) comprising an electric energy bank (44) and a thyristor (38) which are connected in series with the stator winding.

With respect to claim 2, Sugaya discloses a capacitor means (44).

With respect to claim 12, Sugaya discloses the motor is a two-pole rotor (15a,15b).

With respect to claim 15, the inherent function of the thyristor is for breaking or making a current.

With respect to claim 16, Sugaya discloses an operating device (sewing machine) comprising a rotating electric motor, as discussed above in the rejection of claim 1.

6. Claims 1-4 and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Kosak (US 4,134,038).

With respect to claims 1 and 13-14, Kosak discloses a rotating electric motor (fig 1, item 12; col. 2-4) for operating an electric component (col. 1, lines 5-8), said motor being adapted for an operation movement during a limited predetermined angular

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motion (abstract) of the rotor of the motor, said motor comprising an electric drive circuit for the winding of the motor, wherein the electric circuit exhibits at least one branch comprising an electric energy bank (72) and a thyristor (36) which are connected in series with the stator winding. The predetermined angular motion is 360 electrical degrees, or a full wave of the incoming AC signal.

With respect to claim 2, Kosak discloses a capacitor means (72).

With respect to claim 3, Kosak discloses a diode (42) in parallel with the energy bank (72).

With respect to claim 4, Kosak discloses the thyristor is adapted to be turned off when the rotor has carried out less than a good half of the angular motion (abstract). The first Kosak branch controls the motor during the positive half-wave, which is half of the full cycle.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugaya.

With respect to claim 5, Sugaya discloses the thyristors is turned on to achieve the braking phase (col. 8, lines 40-52). With respect to claim 4, it is inherent that the thyristor must be turned off before it can be turned on. It would be obvious to one

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skilled in the art to configure the Sugaya thyristor so that it is off before “less than a good half” of the predetermined angular motion is complete.

With respect to claims 6-7, it would be obvious to one skilled in the art that the Sugaya motor can be turned on and off quickly to limit the angular motion of the motor. Further, it has been held that discovering an optimum value of a result effective variable (angular motion) involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

With respect to claim 8, the Sugaya thyristor is between the voltage source (16,17) and the capacitor (44). It would be obvious to one skilled in the art that with the thyristor on, the capacitor will begin to discharge since its voltage source has been removed. One skilled in the art would be able to turn the Sugaya motor off for long enough for the capacitor to discharge completely. *Id.*

With respect to claim 9, Sugaya discloses three branches (18, 22, 23) connected in parallel. Claim 9 does not recite any limitations associated with the components included on each branch.

With respect to claim 10, Sugaya discloses one power line connecting the power source to the motor. One skilled in the art would recognize this as a single phase motor. A motor with multiple phases would have several lines leading from the source (one line per phase).

9. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugaya in view of Brailsford (US 4,475,068).

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Brailsford discloses that it is known to use motors with permanent magnet rotors (col. 1, lines 10-15). Sugaya and Brailsford are analogous because they are from the same field of endeavor, namely electric motors. At the time of the invention by applicants, it would be obvious to one skilled in the art to use a permanent magnet in the Sugaya motor in order to induce rotation from passing current.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Switching a thyristor to activate an electric motor is well known in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ADI AMRANY whose telephone number is (571)272-0415. The examiner can normally be reached on Mon-Thurs, from 10am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (571) 272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AA

/Stephen W Jackson/
Primary Examiner, Art Unit 2836